MONTHLY WEATHER REVIEW,

NOVEMBER, 1881.

(General Weather Service of the United States.)

WAR DEPARTMENT.

Office of the Chief Signal Officen,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

In preparing this Review the following data, received up to November 20th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 133 Signal Service stations and 14 Canadian stations, as telegraphed to this office; 179 monthly journals and 166 monthly means from the former, and 14 monthly means from the latter; 219 monthly registers from Voluntary Observers; 57 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; Marine reports through the co-operation of the New York Herald Weather Service; monthly reports from the local Weather Services of Iowa, Nebraska and Missouri, and of the Central Pacific Railway Co.; reliable newspaper extracts; special reports.

BAROMETRIC PRESSURE.

The distribution of mean atmospheric pressure over the United States and Canada for the month of November, 1881, is shown by isobaric lines (in black) upon chart No. II. The areas of lowest mean pressure cover the Lake Superior region and the eastern portion of the Canadian Maritime Provinces, while their counterpart, the areas of highest mean pressure, occupy the eastern portion of Tennessee, the northwestern portion of the South Atlantic states, and the central portions of the Middle and Northern Plateau regions. Compared with the preceding month there has been a very decided fall in pressure at most stations north of the 42d parallel and east of the 100th meridian. This region, for the most part, had but just recovered during the month of October from a long period of deficiency, when the month of November introduced a remarkable series of areas of barometric minima in the vicinity of parallel 50° N., a study of which can be made from chart No. I. With hardly an exception, the pressure throughout the remaining portions of the country has risen, the most decided changes coinciding with the regions of highest mean pressure for the month.

Departures from the Normal Values for the Month.—Compared with the means of previous years, the mean pressure for the present month is everywhere above the normal except in the Upper Lake region, Florida Peninsula, South Pacific coast and the Upper Mississippi and Missouri valleys. The regions of greatest deficiency are the Lake Superior and extreme Northwest; departures ranging from 0.05 to 0.09 inch. The regions of greatest excess are found in New England and along the North Carolina coast; departures ranging from 0.07 to 0.14 inch. On the Pacific coast the departures range from —0.06 inch at San Diego to +0.06 inch at Red Bluff. Stations reporting a normal condition are as follows: Cheyenne, North Platte, Leavenworth, Brownsville and Winnemucca.

Barometric Ranges.—The range of pressure for the month has generally varied from 0.8 to 1.3 inches, and in the extremes from 0.3 inch at San Diego and 0.43 inch at Key West to 1.66 inches at Eastport and 1.87 inches at Deadwood. Throughout the several districts the monthly barometric ranges varied as follows: New England, from 1.17 inches at New Haven to 1.33 inches at Thatcher's Island and 1.66 inches at Eastport; Middle Atlantic states, 0.99 at Lynchburg and 1.00 at Washington to 1.11 at New York and 1.12 at Albany; South Atlantic states, 0.72 at Atlanta to 1.05 at Kittyhawk and 1.08 at Hatteras; Florida Peninsula, 0.43 at Key West to